

## Cloud Image Report



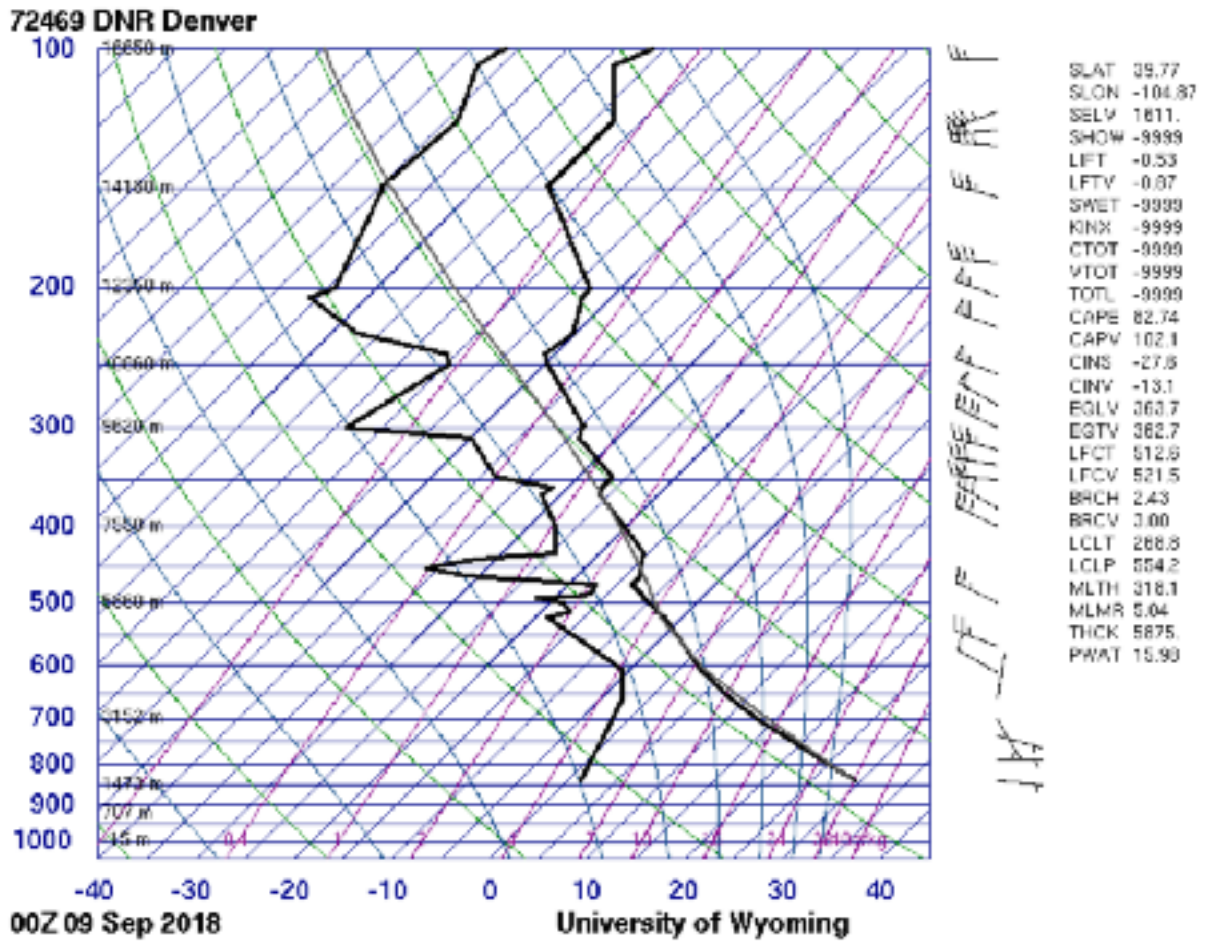
Before Edit



After Edit

I have always loved scenic photography, especially evening sunsets of beautiful clouds. I had taken a few photos with my phone of some sunsets just after the assigned photography date window for our cloud assignment started, but they didn't turn out as well as I would have liked. I also have some wonderful cloud images from just outside the cloud assignment dates, but these wouldn't work either. The point is that whether for an assignment or not, I thoroughly enjoy finding beautiful mountain cloud photos. On this weekend, it was a wonderful Saturday afternoon when I had some time to go for a drive and knew I could probably find some cool daytime clouds. My dad has always said that clouds make any scenic shot more enchanting and I like to stick to this. I find that the context of mountains, trees and clouds only adds to each other. It is very balanced, natural and interesting, making a good way to frame the photo. My goal was a beautiful photo of this type and I am quite happy with the result.

The photo was taken atop the pass between the towns of Gold Hill and Nederland Colorado. The elevation was just over 8500' according to google maps and was taken almost directly facing SW and at 45 deg up from the horizon. It was 3:25 in the afternoon, on a beautiful Colorado Saturday.



This day started as nearly clear in Boulder, CO, with some clouds noticeable over the mountains developing around noon. Around 2:30 pm I started my drive and the clouds were similar to what can be seen in this image throughout the duration of my drive. It had also been similar weather the few days prior. Later in the afternoon, I stopped for coffee in Nederland and the clouds became much darker and socked in. It grew cooler outside and I almost certainly thought it was going to rain, but it never did. I spent until about 6pm in Nederland, and drove home to Boulder, all the while with it not raining. It had been calm most of the day, with some stormy breezing coming in in the late afternoon. The skew T plot [1] was taken from Denver at 00Z the next day the 9th to be closest to the 3:25 pm photo. The plot does not get extremely close together, but we see relatively close points at around 4000m, so around 12,000 ft and at around 8,000 m, so around 24,000 feet. This makes sense for my guess of altocumulus (between 6,000 and 20,000 ft [2]) and cirrocumulus (over 18,000 [2]) ft. It wI can also tell that they are

these types of clouds due to the small clumps under one finger for the highest clouds and similar shape, but lower for the closer clouds. With a cape of 82, it is not perfectly stable, but also not extremely unstable, which makes sense for these clouds and can help explain the moderate stormy formation, but not full rain that I experienced. Also, if my memory serves me correctly, it did become more stormy over the next few days, with this possibly being the start of a front moving in.

For this photo, I used a Nikon D3200 and an AF-S DX VR Zoom-Nikkor 18-55mm f/3.5-5.6 lens. The actual photo was taken at an ISO of 100 because of the abundance of light and was shot in RAW at 4000x6016 pixels. The lens was zoomed to 18mm and f/10 with a shutter speed of 1/400 seconds. I did no cropping on the image, as I really liked the photo as I originally framed and shot it. I slightly increased the saturation from 50 to 65 and increased the shadows from 0 to 71, and took the black point up to 9%

I love how the image shows a perfectly still, tranquil, mountain afternoon. I chose this spot as the trees on the right and left frame the small cloud swirl that is the main attraction of the photo, although I did not put this in the exact middle. I absolutely love aspens changing color, and I think the yellows, greens and subtle oranges really add to the contrast of the perfect white and blue in the sky. I also like how the stillness of the pine trees show the minimal wind and the aspens give insight to a very narrow section of fall at this elevation. We can tell a lot about the time of day, elevation, time of year and feeling of the weather just by looking at the photo and the visual clues that are in it. I think it shows the movement and winds in upper clouds quite well, especially in comparison to how it can be still on the ground. I could not have asked for a more perfect photo when I set off for that afternoon experience.

[1]

<http://weather.uwyo.edu/cgi-bin/sounding?region=naconf&TYPE=GIF%3ASKEWT&YEAR=2018&MONTH=09&FROM=0900&TO=0900&STNM=72469>

[2]

<https://scied.ucar.edu/webweather/clouds/cloud-types>